

DETERMINING SIGNAL TRANSDUCTION PATHWAYS

ABSTRACT

Experimental and analytical methods enable reconstruction of
5 signal transduction networks from gene expression profiles. Signal
transduction pathways can be reverse-engineered by 1) experimentally
manipulating individual genes, 2) generating cellular expression profiles,
and 3) analyzing for common patterns among these profiles. Analysis of
patterns among profiles permits reconstruction of pathways and networks
10 of interrelationships among genes and their products.